

# PUBLIC NOTICE



**US Army Corps  
of Engineers  
Kansas City District**

**Permit No. 200400454  
Issue Date: January 23, 2004  
Expiration Date: February 13, 2004**

**21-Day Notice**

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**JOINT PUBLIC NOTICE:** This public notice is issued jointly with the Kansas Department of Health and Environment. The Department of Health and Environment will use the comments to this notice in deciding whether to grant Section 401 water quality certification. Commenters are requested to furnish a copy of their comments to the Kansas Department of Health and Environment, Bureau of Water - Watershed Management Section, 1000 SW Jackson Street, Suite 420, Topeka, Kansas 66612-1367.

**APPLICANT:** Kansas Department of Transportation  
Docking State Office Building  
915 SW Harrison, 9th Floor  
Topeka, KS 66612-1568

**PROJECT LOCATION** (As shown on the attached drawings): The proposed US-77 reconstruction is a linear project that starts at the north city limits of the City of El Dorado, Kansas, and extends 6.5 miles north to the intersection of County Route RS-862. The proposed project is located in sections 2, 14, 23, and 26, Township 25 south, Range 5 east, and sections 23, 26, and 35, Township 24 south, Range 5 east, in Butler County, Kansas.

**AUTHORITY:** Section 404 of the Clean Water Act (33 USC 1344).

**ACTIVITY** (As shown on the attached drawings): The applicant proposes to reconstruct a 6.5-mile portion of US-77 so that it will comply with current highway safety standards. Because of the lack of a suitable detour, the proposed project will be constructed on offset alignment. Traffic will be carried through the project on the existing highway. The project would include the installation of concrete reinforced pipes, construction of reinforced concrete box bridges and span bridges at 11 locations, and the removal of old bridges and culverts at 12 locations within the alignment. The proposed work would further involve the filling of wetlands, stream channel modifications, and channel fills. The proposed work involves the discharge of 2,866 cubic yards of earthen fill, 1,701 cubic yards of concrete, and 1,542 cubic yards of riprap, into 453 lineal feet (1.77 acres) of streambed and 0.205 acre of wetlands, associated with eleven unnamed tributaries of the West Branch Walnut River. This project further involves 1.042 acre of impacts that would result from the excavation of 1,585 cubic yards of material from the subject 11 tributaries. A wetland mitigation site totaling 0.464 acres is proposed along existing US -77 immediately downstream of the wetland impact, after eradication of the present roadway.

**WETLANDS:** Wetlands that total 0.205 acres would be filled as a result of the proposed project.

**ADDITIONAL INFORMATION:** Additional information about this application may be obtained by contacting **Stephen H. Penaluna, Kansas State Regulatory Office, 2710 NE Shady Creek Access Road, El Dorado, Kansas 67042-8644, at telephone 316-322-8247 (FAX 316-322-8259) or via email at [stephen.h.penaluna@usace.army.mil](mailto:stephen.h.penaluna@usace.army.mil)**. All comments to this public notice should be directed to the above address.

**STATE AUTHORIZATION:** The applicant has applied for a permit from the Kansas Department of Agriculture pursuant to Kansas Statutes Annotated 82a-301 to 305.

**CULTURAL RESOURCES:** Kansas City District will comply with the National Historic Preservation Act of 1966 and 36 CFR 800. We have checked the National Register of Historic Places and the Federal Register and no property listed in the Register or proposed for listing is located in the permit area. This is the extent of our knowledge about historic properties in the permit area at this time. However, we will evaluate input by the State Historic Preservation Officer and the public in response to this public notice, and we may conduct or require a reconnaissance survey of the permit area to check for unknown historic properties, if warranted.

**ENDANGERED SPECIES:** In compliance with the Endangered Species Act, a preliminary determination has been made that the described work will not affect species designated as threatened or endangered or adversely affect critical habitat. In order to complete our evaluation of this activity, comments are solicited from the U.S. Fish and Wildlife Service and other interested agencies and individuals.

**FLOODPLAINS:** This activity is being reviewed in accordance with Executive Order 11988, Floodplain Management, which discourages direct or indirect support of floodplain development whenever there is a practicable alternative. By this public notice, comments are requested from individuals and agencies that believe the described work will adversely impact the floodplain.

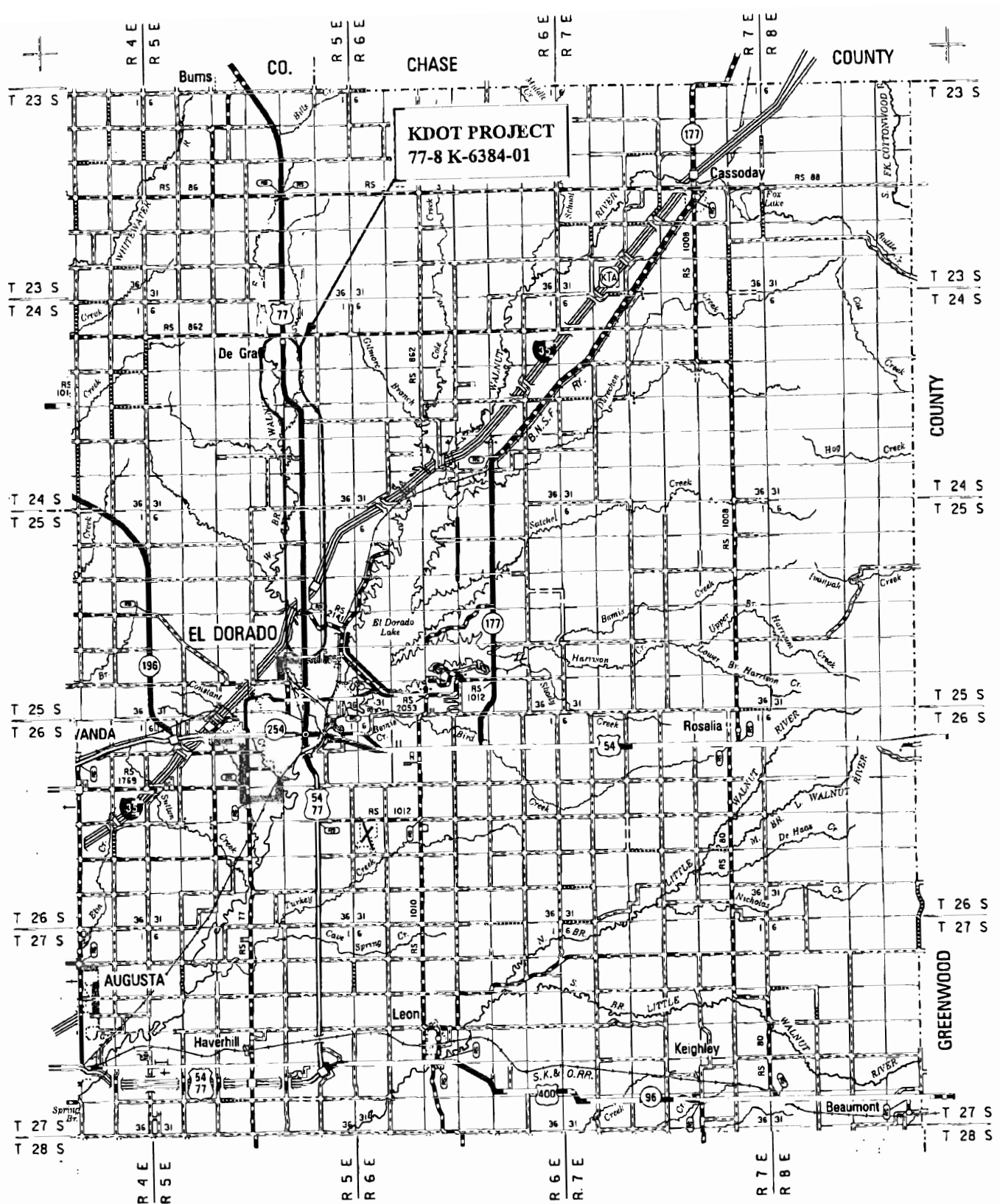
**WATER QUALITY CERTIFICATION:** Section 401 of the Clean Water Act (33 USC 1341) requires that all discharges of dredged or fill material must be certified by the appropriate state agency as complying with applicable effluent limitations and water quality standards. This public notice serves as an application to the state in which the discharge site is located for certification of the discharge. The discharge must be certified before a Department of the Army permit can be issued. Certification, if issued, expresses the state's opinion that the discharge will not violate applicable water quality standards.

**PUBLIC INTEREST REVIEW:** The decision to issue a permit will be based on an evaluation of the probable impact including the cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, esthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people. The evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency under authority of

Section 404(b) of the Clean Water Act (33 USC 1344). The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**COMMENTS:** This notice is provided to outline details of the above-described activity so this District may consider all pertinent comments prior to determining if issuance of a permit would be in the public interest. Any interested party is invited to submit to this office written facts or objections relative to the activity on or before the public notice expiration date. Comments both favorable and unfavorable will be accepted and made a part of the record and will receive full consideration in determining whether it would be in the public interest to issue the Department of the Army permit. Copies of all comments, including names and addresses of commenters, may be provided to the applicant. Comments should be mailed to the address shown on page 2 of this public notice.

**PUBLIC HEARING:** Any person may request, in writing, prior to the expiration date of this public notice, that a public hearing be held to consider this application. Such requests shall state, with particularity, the reasons for holding a public hearing.



PARTIAL GENERAL HIGHWAY MAP

## BUTLER COUNTY KANSAS

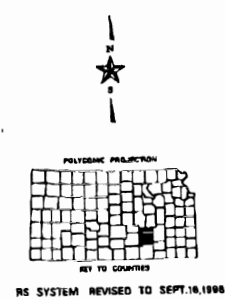
REVISED BY THE  
KANSAS DEPARTMENT OF TRANSPORTATION  
BUREAU OF TRANSPORTATION PLANNING  
IN COOPERATION WITH THE  
U. S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

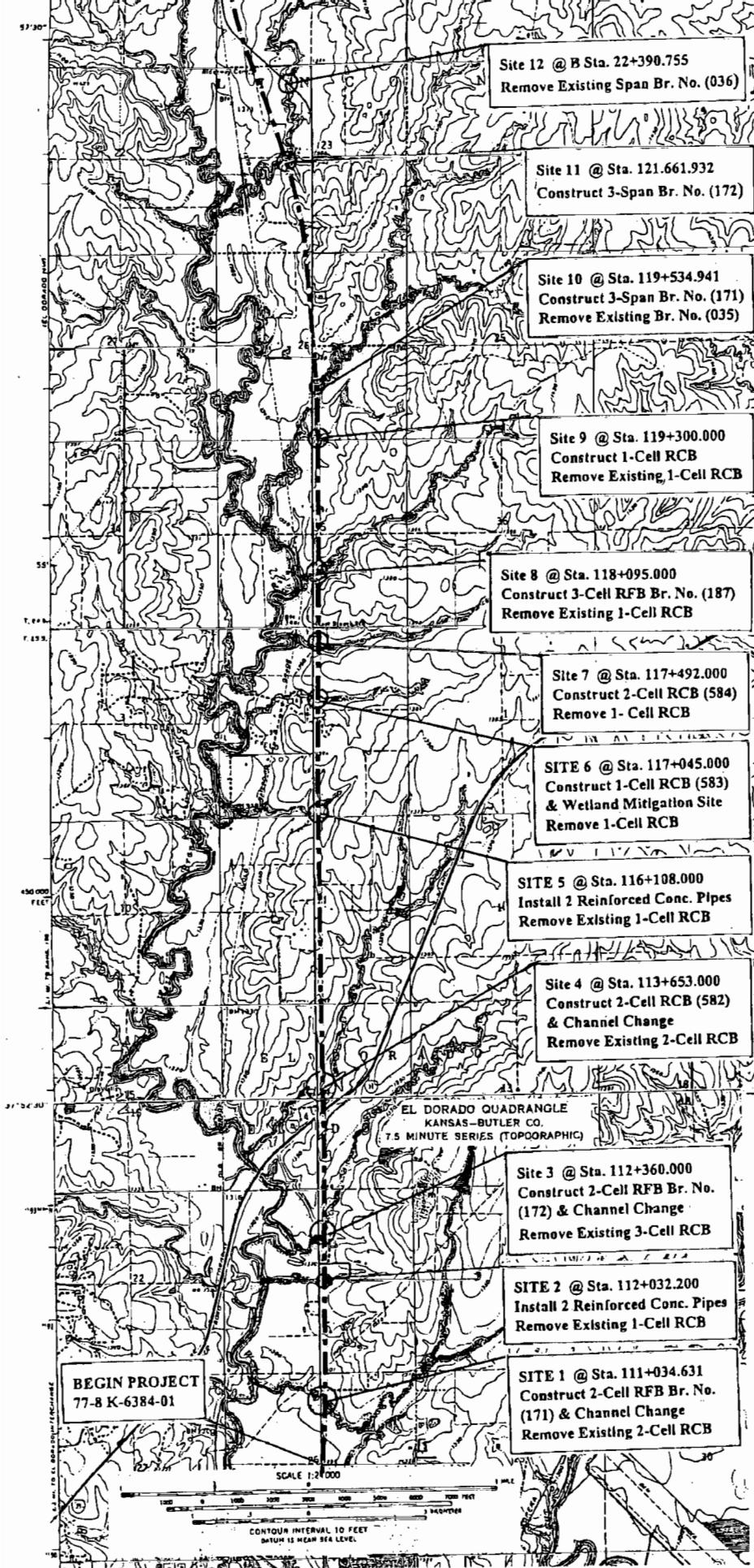
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APPLICATION NO.  
BY: KANSAS DEPARTMENT OF TRANSPORTATION  
KDOT PROJECT 77-8 K-6384-01  
BRIDGE, CULVERT, AND CHANNEL RECONSTRUCTION  
UNNAMED WEST BRANCH WALNUT RIVER DRAINAGES  
BUTLER COUNTY  
December 31, 2003  
SHEET 1 of 4





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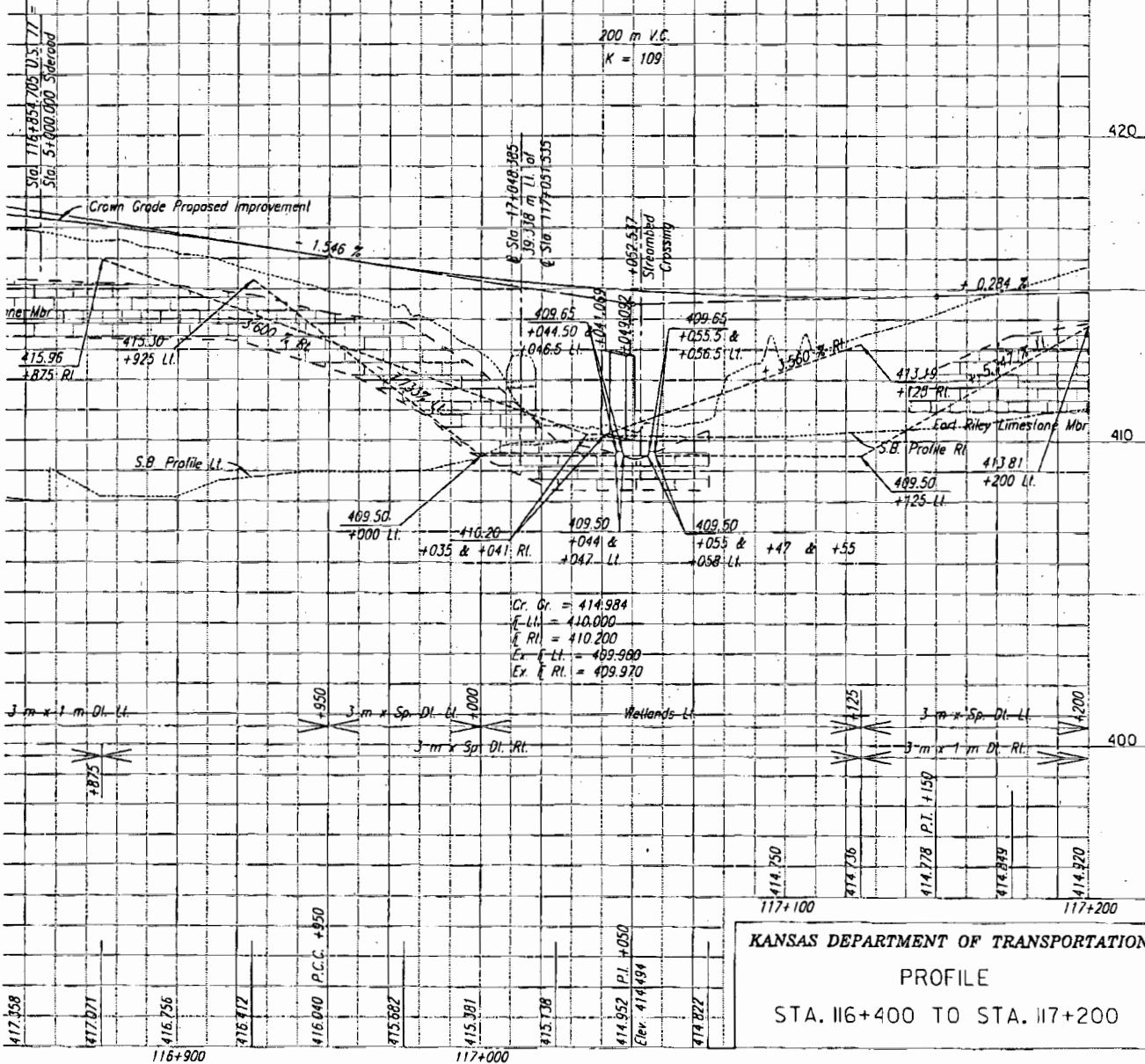
SHEET 2 of 4



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 SHEET 4 of 4

Removal of Existing Pavement to be wasted

Alignment for Entrance Lt. Sta. 116+431.0  
 Alignment for Entrance Lt. Sta. 116+534.0  
 Alignment for Channel Lt. Sta. 117+045.0  
 Alignment for Entrance Lt. Sta. 117+573.0  
 Alignment for 60th Street



KANSAS DEPARTMENT OF TRANSPORTATION  
 PROFILE  
 STA. 116+400 TO STA. 117+200

[illegible]



KDOT PROJECT NO.	SITE NO.	STATION	STRUCTURE / ACTIVITY	STREAM TYPE
K-6384-01	Site 1	111+034.631	Construct 2-Cell 3.0x2.4x46.0 m RFB Br. No. 77-8-34.19 (178) Skewed 30° Rt. w/ Conc. Wingwalls Lt. & Rt. / Apron and Shot Rock Outlet Slope Protection Lt.. Remove existing 2-Cell RCB. Existing channel length of 760 feet will be reduced to 686 feet. Stream mitigation is discussed on separate sheet.	Perennial
K-6384-01	Site 2	112+032.200	Install 2 @1.550m <sup>2</sup> x 45.0m Reinforced Concrete Pipe, Horizontal Elliptical (RCPHE) w/ End Sections and Shot Rock Outlet Slope Protection Lt.. Remove existing 1-Cell RCB. Existing channel length of 238 feet will be reduced to 219 feet.	Ephemeral
K-6384-01	Site 3	112+360.000	Construct 2-Cell 3.0x2.4x68.0 m RFB Br. No. 77-8-34.99 (179) Skewed 45° Lt. w/ Conc. Wingwalls Lt. & Rt. / Apron and Shot Rock Outlet Slope Protection Lt.. Remove existing 3-Cell RCB. Existing channel length of 527 feet will be reduced to 398 feet. Stream mitigation is discussed on separate sheet.	Perennial
K-6384-01	Site 4	113+653.000	Construct 2-Cell 2.4x2.4x98.0 m RCB (582) w/ Conc. Wingwalls Lt. & Rt. / Apron and Shot Rock Outlet Slope Protection Lt.. Remove existing 2-Cell RCB. Existing and proposed channel lengths are 896 feet. Stream mitigation is discussed on separate sheet.	Perennial
K-6384-01	Site 5	116+108.000	Install 2 @1.550m <sup>2</sup> x 39.6m RCPHE w/ End Sections and Shot Rock Outlet Slope Protection Lt.. Remove existing 1-Cell RCB. Existing channel length of 432 feet will be reduced to 369 feet.	Ephemeral
K-6384-01	Site 6	117+045.000	Construct 1-Cell 2.7x2.7x31.0 m RCB (583) Rotate 15° Rt.. w/ Conc. Wingwalls Lt. & Rt. / Apron and Shot Rock Outlet Slope Protection Lt.. Remove existing 1-Cell RCB. Existing channel length of 309 feet will be reduced to 295 feet. Wetland mitigation site (construction in abandoned Rdwy.) is discussed on separate sheet.	Intermittent / Perennial
K-6384-01	Site 7	117+492.000	Construct 2-Cell 2.8x2.8x49.0 m RCB (584) w/ Conc. Wingwalls & Apron Lt. & Conc. Wingwalls Rt. Remove existing 1-Cell RCB. Existing channel length of 313 feet will be reduced to 292 feet.	Intermittent
K-6384-01	Site 8	118+095.000	Construct 3-Cell 2.1x2.1x68.0 m RFB Br. No. 77-8-38.57 (187) Skewed 30° Lt. w/ Conc. Wingwalls & Apron Lt. & Conc. Wingwalls Rt.. Remove existing 1-Cell RCB. Existing channel length of 659 feet will be reduced to 629 feet. Avoidance & minimization measures and stream mitigation is discussed on separate sheet.	Perennial
K-6384-01	Site 9	119+300.000	Construct 1-Cell 2.4x2.4x29.0 m RCB Rotate 10° Lt.. w/ Conc. Wingwalls Lt. & Rt.. Remove existing 1-Cell RCB. Existing channel length of 346 feet will be reduced to 243 feet.	Ephemeral
K-6384-01	Site 10	119+534.941	Construct 9.0-12.0-9.0 m Reinforced Concrete Slab Continuous and Haunched Spans Br. No. 77-8-39.47 (171) w/ 11.0m Rdwy. w/ Shot Rock Slope Protection on new berms. Remove existing Br. No. 77-8-3.80 (035) at Sta. 19+535.417. Existing & proposed channel lengths are 198 feet.	Perennial
K-6384-01	Site 11	121+661.932	Construct on new alignment 17.0-22.0-17.0 m Post Tensioned Concrete Slab Haunched Spans Br. No. 77-8-40.79 (172) w/ 11.0m Rdwy. & Shot Rock Slope Protection on new berms. Existing and proposed channel lengths are 402 feet.	Perennial
K-6384-01	Site 12	Baseline Sta. 22+390.755	Remove on existing alignment 4 @ 9.144m Reinforced Concrete Deck T-Girder Simple Spans Br. No. 77-8-41.27 (036). Existing and proposed channel lengths are 80 feet.	Perennial

1	2	3	4	6	7	8a	8b	8c	9a
PROJECT	SITE NO.	STATION	STRUCTURE	Existing	Propowed	AREA FILL BOHW			AREA EXCAVATION BOHW
				Stream	Stream	Concrete	Earthen	Slope Protection	Earthen
				Length (ft)	Length (ft)	acres	acrea	acres	acres
K-6384-01	1	111+034.631	Br. (178) & Channel	760	686	0.082	0.08	0.045	0.048
K-6384-01	2	112+032.200	2 RCPHEs	238	219	0.048	0	0.004	0.01
K-6384-01	3	112+360.000	Br. (179) & Channel	527	398	0.116	0.048	0.042	0
K-6384-01	4	113+653.000	RCB (582) & Channel	896	896	0.132	0.217	0.055	0.315
K-6384-01	5	116+108.000	2 RCPHEs	432	369	0.051	0.105	0.014	0.014
K-6384-01	6	117+045.000	RCB (583) & Wetland	309	295	0.028	0.037	0.02	0.525
K-6384-01	7	117+492.000	RCB (584)	313	292	0.041	0.035	0.02	0.01
K-6384-01	8	118+095.000	Br. (187) & Channel	659	629	0.125	0.076	0.063	0.029
K-6384-01	9	119+300.000	RCB & Channel	346	243	0.017	0.02	0.012	0.016
K-6384-01	10	119+534.941	Br. (171)	198	198	0	0	0.124	0
K-6384-01	11	121+661.932	Br. (172)	402	402	0.001	0	0.11	0.024
K-6384-01	12	BL 22+390.755	Remove Exist Br. 036)	80	80	0	0	0	0.051
			<b>COLUMN TOTALS</b>			<b>0.641</b>	<b>0.618</b>	<b>0.509</b>	<b>1.042</b>

**CONTINUED**

1	2	3	4	10	11a	11b	11c	12
PROJECT	SITE NO.	STATION	STRUCTURE	AREA FILL		VOLUME FILL BOHW		VOLUME EXCAVATION BOHW
				WETLANDS	Concrete	Earthen	Slope Protection	Earthen
				acrea	cubic yards	cubic yards	cubic yards	cubic yards
K-6384-01	1	111+034.631	Br. (178) & Channel	0	216	211	149	128
K-6384-01	2	112+032.200	2 RCPHEs	0	127	0	11	26
K-6384-01	3	112+360.000	Br. (179) & Channel	0	308	128	143	0
K-6384-01	4	113+653.000	RCB (582) & Channel	0	349	575	176	834
K-6384-01	5	116+108.000	2 RCPHEs	0	135	277	44	116
K-6384-01	6	117+050.000	RCB (583) & Wetland	0.205	74	1326	74	139
K-6384-01	7	117+492.000	RCB (584)	0	109	92	74	26
K-6384-01	8	118+095.000	Br. (187) & Channel	0	330	202	210	77
K-6384-01	9	119+300.000	RCB & Channel	0	46	55	41	43
K-6384-01	10	119+534.941	Br. (171)	0	0	0	329	0
K-6384-01	11	121+661.932	Br. (172)	0	7	0	291	62
K-6384-01	12	BL 22+390.755	Remove Exist Br. 036)	0	0	0	0	134
			<b>COLUMN TOTALS</b>	<b>0.205</b>	<b>1701</b>	<b>2866</b>	<b>1542</b>	<b>1585</b>

## **Avoidance and Minimization Measures and Proposed Mitigation**

An on-site meeting was held on November 6, 2003, with Natural Resource Agency representatives: Susan Blackford, U.S. Fish & Wildlife Service (USFWS), Bryan Simmons, Ks. Department of Wildlife & Parks (KDWP), and Stephen Penaluna, U.S. Army Corps of Engineers (CoE), and Ks. Department of Transportation (KDOT) Bureau of Design staff. The purpose of the meeting was to discuss the design of the project and get input from CoE, USFWS, and KDWP to reduce the stream impacts and channelization while taking into account that US-77 and its stream crossing structures were constructed in the 1930s and needed to be upgraded for both the safety and convenience of the motoring public. No suitable detour route exists, and the project will be built on offset alignment to allow for the flow of traffic through the project during construction. Five of the twelve stream crossings are discussed below.

### **Site 1 at Sta. 111+034.631 - Br. No. 77-8-34.19 (178) and Channel Relocation.**

#### **Avoidance and Minimization Measures:**

Our consultant's original design for this site proposed impacting 1002 feet of the existing channel between the construction limits. The proposed new channel was to be 777 feet long, and replaced the current structure with a longer 2-Cell concrete bridge sized box culvert that was to be skewed to follow the direction of the existing channel from the inlet on the right and outlet into the existing channel downstream on the left. The shoofly detour on the right is required for safety reasons because the offset alignment is just separating from the existing roadway and the traffic in this area would be too close to the construction.

In response to Natural Resource Agency suggestions, KDOT moved the construction limits closer to the roadway. This resulted in avoidance of 247 feet of existing upstream channel. A permanent easement had been obtained by KDOT for this area prior to the design change. We are retaining the easement, and have placed a note on the plans instructing the contractor to place a temporary fence as shown on the to avoid any disturbance to the area.

The next portion of the existing stream is in the area of the proposed shoofly detour. Approximately 220 feet of existing stream channel will be filled. The Natural Resource Agencies suggested the possibility of moving the shoofly farther east into the crop land area. Our KDOT Design Engineers considered this suggestion, but decided it was not feasible to locate the shoofly in the crop land because the increased severity of the curves would not be safe. If the sharpness of the curves were reduced to safe standards, the length of the shoofly would increase in length and considerable additional right-of-way or easement would have to be purchased. Impacts to the remainder of the existing channel to the proposed construction limits on the right include channel excavation to the inlet of proposed Br. No. (178), and fill for structure and outlet scour protection.

#### **Mitigation:**

1. We have added sinuosity into the design of the stream channel, replacing the original nearly straight design.
2. A vegetative corridor composed of a blend of native grasses, 50 feet in width, and wider where possible, will be established along both banks of the proposed stream channel.

### **Site 3 at Sta. 112+360.000 - Br. No. 77-8-34.99 (179) and Channel Relocation.**

#### **Avoidance and Minimization Measures:**

Our consultant's original design for this site proposed impacting 1000 feet of the existing channel between the construction limits. The proposed new channel was to be 700 feet long, and replaced the current structure with a longer, 2-Cell concrete bridge sized box culvert that was to be skewed to follow the direction of the existing channel from the inlet on the right and outlet into the existing channel downstream on the left.

In response to Natural Resource Agency suggestions, KDOT moved the construction limits as close to the entrance of the proposed structure as possible. This resulted in avoidance of 485 feet of existing upstream channel. A temporary easement and temporary fencing will protect this area from being disturbed during construction.

### **Site 4 at Sta. 113+653.000 - RCB (582) and Channel Relocation.**

#### **Avoidance and Minimization Measures:**

During construction of the Kansas Turnpike, the US-77 roadway embankment was raised and widened to bridge the turnpike. During that construction, the upstream channel of this unnamed West Branch Walnut River drainage was moved eastward to it's current location. The proposed offset alignment results in the current channel having to be relocated.

Our consultant's original design for this site proposed upstream construction of a shot-rock lined 3.0m bottom width channel east of the existing channel. The proposed channel was 12 feet shorter than the existing channel length of 895 feet. By adjusting the construction limits the existing and proposed channel lengths both equal 896 feet for the current design.

An inquiry from the Resource Agencies asked if the downstream channel modification was necessary? Our Design Engineers explained that the modification of Riverwood Drive in the northwest quadrant of the US-77 crossing over the Kansas Turnpike encroached into the existing downstream channel and necessitated relocation of the channel to the north.

#### **Mitigation:**

1. Resource Agencies suggested the upstream construction of a wide flat-bottom earthen channel that would allow the stream to seek it's own path and establish it's own sinuosity. Our consultants were instructed to modify the upstream design incorporating that suggestion.

### **Site 6 at Sta. 117+045.000 - RCB (583) and Wetland Fill.**

#### **Avoidance and Minimization Measures:**

The consultants original design for this site proposed straightening the existing channel from the west edge of the proposed downstream scour protection to the northwest into the existing channel. Straightening the downstream

channel shortened the existing channel 30 feet. After our, November 6, 2003, onsite meeting with the Natural Resource Agencies, KDOT had the design consultant remove this downstream channel change.

A cattail marsh approximately 25 feet wide on each side of the center of this unnamed West Branch Walnut River drainage extends upstream from the inlet of existing culvert to the proposed construction limits. New US- 77 roadway embankment construction of on offset alignment was originally designed to fill approximately 0.281 acres (245ft x 50ft) of that wetland. However, our Design Engineers have reduced the impact on this wetland by relocating the upstream construction limits closer to the proposed roadway. The area of impact to the existing wetland is now proposed to be approximately 0.205 acres (179ft x 50ft) which is minimum necessary to construct the proposed roadway.

### **Mitigation:**

A wetland mitigation site totaling 0.464 acres will constructed at this site downstream of proposed RCB (583). The existing cattail marsh topsoil will be excavated and stockpiled. The existing road surface will be eradicated and wasted on an upland site. The existing roadway embankment and limestone ledge under it, as illustrated on plan sheet (Page 3 of 4) will be excavated below the flowline elevation of the stream. A layer of predominantly clay fill will be spread on top of the limestone. The stockpiled wetland topsoil will be spread over the clay fill. The surface elevation of the constructed wetland will be the flowline of the stream to provide hydrology from the stream. Right-of-way drainage in the area from both the proposed and existing roadways will supply additional hydrology.

### **Site 8 at Sta. 118+095.000 - Br. No. 77-8-38.57 (187) and Channel Reshaping.**

### **Avoidance and Minimization Measures:**

Our consultant's original design for this site included within our right-of-way a portion of the existing pond dam located upstream of our proposed new alignment. For KDOT, acquiring ownership of any part of this pond dam was not an option. The liabilities involved with ownership of the dam or pond was far to great. On November 6, 2003, KDOT visited with the Natural Resource Agencies about various options we were considering at this site.

We discussed the option of obtaining easement for the entire pond. Then draining and mucking it out. We were informed that we would have to offer mitigation for the nearly 3 acres of loss of waters of the U.S.. This mitigation would require purchasing the property to provide permanent mitigation.

We considered purchasing the pond, draining and mucking, and constructing a 4 or 5 acre wetland as out-of-kind mitigation for the loss of the pond. However, we found that the existing culvert also served as a stock pass from the pasture on the west side of US-77. There was also the issue of the pond being the only source of water for livestock owned by the adjacent property owner to the south.

We discussed reducing our right-of-way to avoid the pond dam entirely. This option would require KDOT to steepen the slope of the roadway embankment and necessitate the construction of guardfence for the safety of the motoring public on the east side of US-77. This option also reduced the length of the proposed culvert by 10 feet. After thorough consideration of the various options, including the various mitigation options and the fact that the acquisition of the property as originally designed was still in condemnation court, KDOT decided to avoid the pond dam and pond entirely.

Upstream channel impact consists of minor excavation and reshaping of the stream from the pond overflow, around the northwest corner of the dam to where it exits from the construction limits. The KDOT has instructed the

contractor to install a temporary fence to protect the existing channel within our right-of-way to avoid any channel disturbance upstream of the proposed bridge to where the channel is to be reshaped downstream of the pond outlet.

Allowing the proposed bridge to continue to serve as a stock pass required that the shot rock scour protection on the original design be altered to use concrete scour protection. The impact to the stream below OHW, due to the change from shot rock to concrete scour protection, is the same.

Stream impacts to waters of the U.S. for the seven other stream crossing sites are not listed above. Six of these sites involve replacement of existing structures on offset roadway alignment. Existing stream impacts at these six sites occur between the inlet and outlet of the proposed structure where construction can not follow the path of the existing stream. Impact at the seventh site involves removal of existing Br. No. (036).